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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,193	05/06/2004	Federico Pemi	U 015183-5	6994

140 7590 11/24/2006

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26 WEST 61ST STREET
NEW YORK, NY 10023

EXAMINER

BOES, TERENCE

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/840,193	Applicant(s) PERNI ET AL.	
	Examiner Terence Boes	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/06/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species II, figure 4 in the reply filed on 09/18/2006 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement filed 05/06/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Applicant has submitted English abstracts of JP 06 017898, and JP 11 132305, however, the entirety of the documents have not been received and therefore have not been considered.

Specification

4. The abstract of the disclosure is objected to because the recitation "... (Figure 1)..." appearing at the end of the abstract unnecessary. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda et al. US 6,276,255.

Takeda et al. disclose:

- A shaft (11) having an external thread
- A spiral casing (13) mounted coaxially with said shaft
- At least one set of balls interposed between the shaft and the casing (12)
- Two seals fitted, coaxially with said axis, between the shaft and the casing to define, together with the shaft and the casing, a chamber (C4/L45-50)
- Characterized in that each seal comprises an annular member (20) made of a first material (resin which is a plastic and/or polymer material, C4/L55-57) having a first coefficient of thermal expansion and at least one insert (22) located inside said annular member and made of a second material (see fig. 4, cross hatching indicates 22 is metal, also see MPEP 608.02 for material/ hatching correlation) having a second coefficient of thermal expansion lower than said first coefficient (it is well known that plastic and metal have different coefficients of thermal expansion).

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- Wherein said insert is an annular insert
- Wherein said insert has a substantially circular cross section
- Wherein said first material is a plastic material (resin which is a plastic and/or polymer material, C4/L55-57)
- Wherein said first material is a polymer material (resin which is a plastic and/or polymer material, C4/L55-57)
- Wherein said second material is a metal material (see fig. 4, cross hatching indicates 22 is metal, also see MPEP 608.02 for material/hatching correlation)
- Wherein each annular member is defined axially by two surfaces (see fig 4) substantially perpendicular to said axis, and comprises a number of teeth (214) projecting axially from one of said surfaces and equally spaced about said axis
- Wherein each tooth is substantially-sector shaped
- Wherein each annular member has an internal thread of substantially the same hand as the external thread (see fig 4)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. US 6,276,255 in view of Balsells US 5,984,316.

Takeda et al. disclose all of the claimed subject matter as described above.

Takeda et al. also disclose:

- Wherein each annular member is defined externally by a surface substantially coaxial with said axis (see fig 4, radially outermost surface of 20), comprises an annular recess (see fig. 4, recess is shown containing 22) opening outwards at said surface.

Takeda et al. do not disclose an O-ring housed in an annular recess.

Balsells teaches O-ring (80) housed in an annular recess for the purpose of providing a secondary static seal between a seal ring and a housing (C5/L30-33).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Takeda et al. and provide O-ring housed in an annular recess, as taught by Balsells, for the purpose of providing a secondary static seal between a seal ring and a housing.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB
11/14/06



RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER